NFD-Android Enhancements

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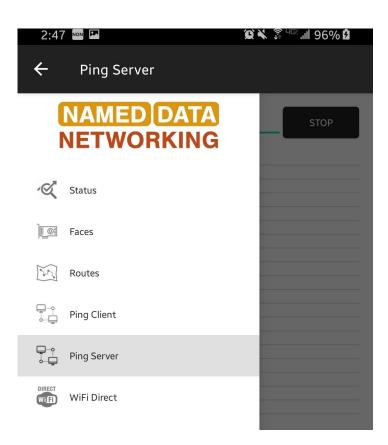
Planned Tasks (4-person project)

- Add ndnping server and extend existing client implementation
- Allow changing strategy choices and content store configuration at runtime
- Modify global NFD settings from the app: face protocols, multicast, logging, ...
- Hub discovery improvements: Wi-Fi access point or IP gateway, DNS-SD, fix bugs, ...
- Bug fixes and stability enhancements (#4870, #4948, ...)
- UI/UX improvements

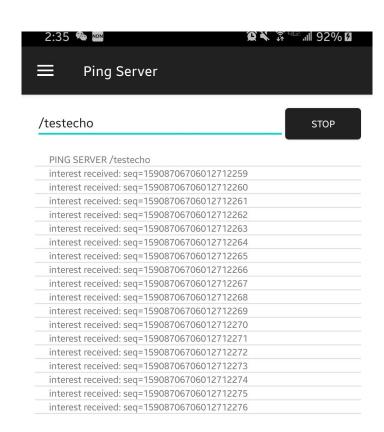
Accomplished Tasks

- Add ndnping server (#4765) and extend existing client implementation
- Allow changing strategy choices and content store configuration at runtime
- Modify global NFD settings from the app: face protocols, multicast, logging, ...
- Hub discovery improvements: Wi-Fi access point or IP gateway, DNS-SD, fix bugs, ...
- Bug fixes and stability enhancements (#4870, #4948, ...)
- UI/UX improvements

PING Server



PING Server



```
jupan-mac:ndn-tools jupan$ ndnping ndn:/testecho
PING /testecho
content from /testecho: seq=15908706706012712259 time=108.43 ms
content from /testecho: seq=15908706706012712260 time=191.523 ms
content from /testecho: seg=15908706706012712261 time=33.661 ms
content from /testecho: seq=15908706706012712262 time=62.655 ms
content from /testecho: seq=15908706706012712263 time=96.973 ms
content from /testecho: seq=15908706706012712264 time=41.987 ms
content from /testecho: seq=15908706706012712265 time=130.103 ms
content from /testecho: seq=15908706706012712266 time=37.857 ms
content from /testecho: seq=15908706706012712267 time=51.607 ms
content from /testecho: seq=15908706706012712268 time=91.05 ms
content from /testecho: seg=15908706706012712269 time=116.045 ms
content from /testecho: seq=15908706706012712270 time=116.415 ms
content from /testecho: seq=15908706706012712271 time=29.647 ms
content from /testecho: seq=15908706706012712272 time=76.131 ms
content from /testecho: seq=15908706706012712273 time=94.282 ms
content from /testecho: seq=15908706706012712274 time=111.454 ms
content from /testecho: seg=15908706706012712275 time=194.052 ms
content from /testecho: seq=15908706706012712276 time=24.658 ms
^C
--- /testecho ping statistics ---
18 packets transmitted, 18 received, 0 nacked, 0% lost, 0% nacked, time 1608.53 ms
rtt min/avg/max/mdev = 24.658/89.3628/194.052/49.1614 ms
jupan-mac:ndn-tools jupan$ ■
```

Half-way Tasks

- Add ndnping server (#4765) and extend existing client implementation
- Allow changing strategy choices (#3462) and content store configuration at runtime
- Modify global NFD settings from the app: face protocols, multicast, logging, ...
- Hub discovery improvements: Wi-Fi access point or IP gateway, DNS-SD, fix bugs, ...
- Bug fixes and stability enhancements (#4870, #4948, ...)
- UI/UX improvements

Problem (Future work)

• jNDN management doesn't support retrieving strategy choice.